

Vote 29

Minerals and Energy

To be appropriated by Vote	R1 205 782 000
Statutory appropriations	-
Responsible Minister	Minister of Minerals and Energy
Administering Department	Department of Minerals and Energy
Accounting Officer	Director-General of Minerals and Energy

Aim

The aim of the Department of Minerals and Energy is to formulate and implement an overall mineral and energy policy in order to ensure the optimum utilisation of mineral and energy resources.

Key objectives and programmes

Prudent management and use of natural resources is critical for sustainable socio-economic development. Strategic natural resource management and utilisation strategies may also promote job creation and ensure equitable delivery of basic energy services. The Department of Minerals and Energy is pivotal in this regard. Its vision is to:

- Play a constructive role in positioning the minerals and energy industry for global competitiveness
- Contribute to the effectual and sustainable development of minerals and energy resources
- Govern these industries to ensure that they provide safe and healthy working environments by international standards
- Address past imbalances and promote equitable redistribution of benefits derived from the exploitation of minerals and energy resources

The Department has identified its key strategic objectives over the medium term to be promoting health and safety in mining operations, facilitating mining and the utilisation of mineral resources, and developing energy resources. These objectives are met through five programmes:

- *Administration* conducts the overall management of the Department.
- *Promotion of mine safety and health* ensures the safe mining of minerals under healthy working conditions.
- *Mineral development* promotes the orderly and continuous mining and utilisation of mineral resources.
- *Energy management* develops energy resources and promotes the optimum utilisation thereof.
- *Associated services* render services related to the Department's aims.

Strategic overview and key policy developments: 1997/98 – 2003/04

Over the medium to long term, the Department of Minerals and Energy aims to vest all mineral rights with Government and give greater attention to the small-scale mining sector through new development and promotion initiatives. In April 1999, the Minister launched the National Small-scale Mining Development Framework to assist first-time entrepreneurs in overcoming the many constraints faced by small-scale miners. Three pilot projects started operations during 2000/01.

The Department is restructuring the electricity distribution industry, establishing regional electricity distributors to facilitate quality distribution, equitable pricing strategies and the financial viability of the industry. The restructuring process should not jeopardise the electrification programme, the country's competitive advantage in terms of electricity prices and the revenue flows to local government from the current system. It is anticipated that the second phase of the restructuring will be initiated early in 2001.

In accordance with the White Paper on Energy Policy, the National Electrification Programme reverts to the Department of Minerals and Energy with effect from 1 April 2001. Eskom has planned, implemented and funded the programme since 1994. From April this year, the Department assumes financial, strategic and operational responsibility for the programme. The initial target to electrify 1,75 million by 2000 was exceeded in 1999. The programme has facilitated electrification of more than 42 per cent of rural households by the end of 1999. The change in the tax status of Eskom from 1 January 2000 has implied that Eskom should be relieved of its social mandate (electrification), which is essentially a public service. The White Paper on Energy Policy had anticipated the transfer of the current surcharge in the electricity price as a dedicated funding mechanism for the programme. However, as a result of changes in underlying assumptions, future electrification funding will be allocated as part of the normal budget of the Department.

The Department has undertaken several reviews on various aspects of the liquid fuels industry. These include general issues of deregulation, tariff protection to the synthetic fuels industry, the pricing mechanism of liquid fuels, and the restructuring of the Central Energy Fund. A policy framework is being developed to:

- Ensure provision of low-cost energy in the form of liquid fuels and gas
- Manage the technology and production shift in the economy from coal-based liquid fuels and petrochemicals to crude oil and gas-based liquid fuels and petrochemicals
- Increase natural gas usage, industrial efficiency and energy security, and mitigate hydrocarbon environmental externalities

Expenditure estimates

Table 29.1: Minerals and Energy

Programme	Expenditure outcome					Medium-term expenditure estimate		
	Audited 1997/98	Audited 1998/99	Preliminary outcome 1999/00	Adjusted appropriation 2000/01	Revised estimate	2001/02	2002/03	2003/04
R thousand								
Administration ¹	32 857	37 405	42 659	46 424	46 424	52 850	55 947	59 469
Promotion of mine safety and health	44 666	56 547	62 238	68 865	68 865	74 674	79 982	83 598
Mineral development	38 109	50 458	55 721	63 202	63 202	78 698	82 182	86 018
Energy management	35 331	44 882	19 862	48 800	48 800	634 073	637 098	638 401
Associated services	674 208	482 840	430 976	376 420	376 420	365 487	607 386	356 538
Total	825 171	672 132	611 456	603 711	603 711	1 205 782	1 462 595	1 224 024
Change to 2000 Budget Estimate				25 992	25 992	621 083	633 486	

¹ Authorised losses of R229 000 in 1998/99 included

Economic classification								
Current	614 697	591 369	562 883	575 067	575 067	570 218	600 957	599 976
Personnel	76 802	92 808	100 789	113 213	113 213	121 623	128 304	134 706
Transfer payments	471 207	416 761	398 035	383 001	383 001	343 069	359 322	346 365
Other current	66 688	81 800	64 059	78 853	78 853	105 526	113 331	118 905
Capital	210 474	80 763	48 573	28 644	28 644	635 564	861 638	624 048
Transfer payments	204 685	75 006	42 860	23 271	23 271	631 149	856 784	619 055
Acquisition of capital assets	5 789	5 757	5 713	5 373	5 373	4 415	4 854	4 993
Total	825 171	672 132	611 456	603 711	603 711	1 205 782	1 462 595	1 224 024

Standard items of expenditure								
Personnel	76 802	92 808	100 789	113 213	113 213	121 623	128 304	134 706
Administrative	20 266	24 524	26 771	31 306	31 306	46 010	49 283	52 129
Inventories	2 253	2 448	3 062	3 095	3 095	3 560	4 051	4 282
Equipment	6 771	7 199	7 677	7 626	7 626	6 818	7 404	7 582
Land and buildings	-	-	-	1	1	1	1	1
Professional and special services	42 137	51 812	30 663	40 625	40 625	53 452	57 346	59 804
Transfer payments	675 892	491 767	440 895	406 272	406 272	974 218	1 216 106	965 420
Miscellaneous	1 050	1 574	1 599	1 573	1 573	100	100	100
Total	825 171	672 132	611 456	603 711	603 711	1 205 782	1 462 595	1 224 024

Departmental receipts

Departmental receipts of R1,5 billion, R1 billion and R287 million were received during 1997/98, 1998/99 and 1999/00, respectively. Included in these amounts are R1,4 billion in 1997/98 and R800 million in 1998/99 from the sale of crude oil, and R188 million in 1999/00 from dividends paid by the Central Energy Fund. The estimated income for 2000/01 amounts to R85 million, rising to between R89 million and R100 million per year over the medium term.

Expenditure trends

Expenditure on the Vote declined significantly by an average of 9,9 per cent a year between 1997/98 to 2000/01, owing mainly to the fall in spending on the *Associated services* programme, which declined by an average of 17,7 per cent a year. This programme comprises transfers to the science councils and the South African Nuclear Energy Corporation – the former Atomic Energy Corporation. The share of the programme has declined from 81,7 per cent in 1997/98 to 62,4 per cent in 2000/01, and is projected to average 33,6 per cent of the total over the medium term.

Nuclear activities have been curtailed, and operational allocations decline from R220,8 million in 1997/98 to R140,2 million in 2003/04, owing to the decommissioning of certain projects, normally referred to as the Z plant closure. About R231,2 million was allocated for the repayment of the strategic loans of the Corporation in 1997/98, as is R265,5 million in 2002/03. These repayments have, otherwise, averaged about R40 million a year in the interim period and will be redeemed by 2004/05.

The most significant trend on the Vote over the medium term relates to the subsidisation of the national electrification programme. Under the *Energy management* programme, R600 million a year is allocated to the electrification programme from 2001/02 to 2003/04. Spending on *Energy management* is projected to grow by 135,6 per cent a year and that on the Vote by 26,6 per cent a year.

Current expenditure declined from R614,7 million in 1997/98 to R575,1 million in 2000/01, and remains stable at an average of R590 million a year over the medium term. Personnel expenditure, however, increased from 12,5 per cent of current expenditure in 1997/98 to 22,5 per cent in

2003/04. Capital expenditure shows significant increases over the medium term, mainly as a result of the inclusion of the National Electrification Programme.

Programme 1: Administration

The aim of the programme is to conduct the overall management of the Department. It is responsible for policy formulation by the Minister, Deputy Minister and members of Department's management. It also comprises financial management, personnel and provisioning administration, and legal and other support services.

Table 29.2: Administration

Subprogramme	Expenditure outcome			Adjusted appropriation 2000/01	Medium-term expenditure estimate		
	Audited 1997/98	Audited 1998/99	Preliminary outcome 1999/00		2001/02	2002/03	2003/04
R thousand							
Minister ¹	424	475	518	518	577	608	639
Deputy Minister ²	345	386	421	421	469	494	519
Management	2 805	3 659	3 520	4 326	4 882	5 423	5 439
Corporate services	29 283	32 885	38 200	41 159	46 922	49 422	52 872
Total	32 857	37 405	42 659	46 424	52 850	55 947	59 469
Change to 2000 Budget Estimate				1 632	4 285	5 151	

¹ Payable as from 1 April 2000: salary: R435 027, car allowance: R108 757

² Payable as from 1 April 2000: salary: R342 584, car allowance: R99 396

Economic classification

Current	30 453	34 191	39 435	43 372	49 699	52 076	55 540
Personnel	15 548	16 192	17 500	20 930	22 116	23 654	25 748
Transfer payments	-	-	-	-	-	-	-
Other	14 905	17 999	21 935	22 442	27 583	28 422	29 792
Capital	2 404	3 214	3 224	3 052	3 151	3 871	3 929
Transfer payments	-	-	-	-	-	-	-
Acquisition of capital assets	2 404	3 214	3 224	3 052	3 151	3 871	3 929
Total	32 857	37 405	42 659	46 424	52 850	55 947	59 469

Standard items of expenditure

Personnel	15 548	16 192	17 500	20 930	22 116	23 654	25 748
Administrative	7 452	8 476	10 016	9 871	14 717	15 310	16 108
Inventories	1 586	1 531	2 191	2 007	2 436	2 769	3 006
Equipment	3 032	4 322	4 854	5 007	5 196	6 003	6 127
Land and buildings	-	-	-	-	-	-	-
Professional and special services	5 061	6 443	7 863	8 370	8 285	8 111	8 380
Transfer payments	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Civil Pensions Stabilisation Fund	158	212	235	239	-	-	-
Bank charges	20	229	-	-	100	100	100
Total	32 857	37 405	42 659	46 424	52 850	55 947	59 469

Expenditure trends

The *Administration* programme has grown at an average rate of 12,2 per cent a year from 1997/98 to 2000/01 and is projected to increase by an average of 8,6 per cent a year over the medium term. This is attributed mainly to the increase in support services provided to the Department and to policy formulation by the management of the Department.

Programme 2: Promotion of mine safety and health

The aim of the programme is to ensure the safe mining of minerals under healthy working conditions. It comprises two subprogrammes:

- Management undertakes overall guidance, planning and control of the programme. It is also responsible for the policy process for the establishment and application of mine safety, equipment safety and mine health standards after mining operations.
- Mine safety and health is responsible for ensuring compliance with safety and health standards by mining operations through mine surveying and inspection services.

Table 29.3: Promotion of mine safety and health

Subprogramme	Expenditure outcome			Adjusted appropriation 2000/01	Medium-term expenditure estimate		
	Audited 1997/98	Audited 1998/99	Preliminary outcome 1999/00		2001/02	2002/03	2003/04
R thousand							
Management	2 248	2 270	2 570	3 097	3 295	3 542	3 605
Mine safety and health	42 418	54 277	59 668	65 768	71 379	76 440	79 993
Total	44 666	56 547	62 238	68 865	74 674	79 982	83 598
Change to 2000 Budget Estimate				1 532	3 024	3 966	
Economic classification							
Current	42 535	55 268	61 111	67 961	74 184	79 616	83 197
Personnel	29 807	38 746	43 690	48 196	52 069	54 755	57 152
Transfer payments	-	2 400	3 431	2 800	-	-	-
Other current	12 728	14 122	13 990	16 965	22 115	24 861	26 045
Capital	2 131	1 279	1 127	904	490	366	401
Transfer payments	-	-	-	-	-	-	-
Acquisition of capital assets	2 131	1 279	1 127	904	490	366	401
Total	44 666	56 547	62 238	68 865	74 674	79 982	83 598
Standard items of expenditure							
Personnel	29 807	38 746	43 690	48 196	52 069	54 755	57 152
Administrative	6 568	8 490	8 140	10 613	13 372	15 568	16 531
Inventories	168	242	286	300	286	366	359
Equipment	2 184	1 329	1 162	936	533	448	458
Land and buildings	-	-	-	-	-	-	-
Professional and special services	5 522	4 796	4 820	5 307	8 414	8 845	9 098
Transfer payments	-	2 400	3 431	2 800	-	-	-
Miscellaneous							
Civil Pensions Stabilisation Account	417	544	709	713	-	-	-
Total	44 666	56 547	62 238	68 865	74 674	79 982	83 598

Policy developments

The promulgation of the Mine Health and Safety Act of 1996 formed the basis for the protection of employees and other persons involved in mining activities. The Department now has an effective system to monitor and inspect mines, and to undertake investigations to improve mine health and safety. Processes for identifying hazards and control and eliminate health and safety risks are properly regulated. As a result of these developments, the programme oversaw a steady decline in accidents in the mining industry.

During 1999/00, the Department initiated a process to draft regulations on health and safety policies, and guidelines on codes of practice in the mining industry. Six generic topics were identified for potential regulations: mining, mining equipment, mine surveying, occupational medicine and occupational hygiene. Annual medical reports received in 1999 show a definite improvement in occupational health compliance.

Expenditure trends

The *Promotion of mine safety and health* programme consumes an average of 6,2 per cent of the Vote over the medium term. Spending on the programme increased by an average of 15,5 per cent a year between 1997/98 and 2000/01, and grows by 6,7 per cent a year over the next three years.

Personnel expenditure is the largest item of the programme and accounts for about 70 per cent of the total programme allocation. This reflects the significant number of mine inspections and audits conducted each year. Strict monitoring of compliance levels by mining operations and improved mine assessments have been credited with the decrease in fatal accidents from 12 deaths per 1 000 employees in 1995 to 0,69 deaths per 1 000 employees in 2000. Reportable injuries have likewise decreased.

Outputs and service delivery trends

Table 29.4: Promotion of mine safety and health: Key outputs and indicators

Subprogramme	Outputs	Service delivery indicators
Management	Policy and legal framework	Regulations on health and safety standards developed
Mine health and safety	Safety and health standards	25 per cent improvement in reportable accidents 30 per cent reduction in fatal accidents Approximately 3 000 accident investigations conducted 14 000 and 3 500 inspections and audits conducted, respectively Issue 5 900 instructions on risks at mines Improved quality of inspections Improved compliance by mine operations
	Information base	Issue 5 900 instructions on risks at mines

Programme 3: Mineral development

The aim of the programme is to promote orderly and continuous mining and utilisation of mineral resources. It is divided into four subprogrammes:

- Management provides overall guidance, planning and control of the programme.
- Mineral regulation promotes uniform application of policy and legislation, manage and allocate prospecting and mining rights, registration of mining deeds and ensure condition compliance. It involves development of and compliance to mine environment standards and approval of environmental management programmes. It also involves the rehabilitation of derelict or ownerless mines that may cause a safety or health risk to neighbouring communities or have the potential to cause environmental pollution.
- Mineral promotion renders advice and coordinates government assistance to mines, including small-scale mining activities. It also serves as a source of information on mineral occurrence and the value of mines, and thus promotes mineral exploitation and refinement.
- Regional mineral development renders administrative, financial and auxiliary services in regions and controls mineral development activities.

Expenditure estimates

Table 29.5: Mineral development

Subprogramme	Expenditure outcome			Adjusted appropriation 2000/01	Medium-term expenditure estimate		
	Audited 1997/98	Audited 1998/99	Preliminary outcome 1999/00		2001/02	2002/03	2003/04
R thousand							
Management	9 783	12 609	1 739	2 195	2 902	3 941	4 187
Mineral regulation	7 737	11 740	13 425	15 494	26 131	26 714	27 815
Mineral promotion	7 566	11 232	13 671	15 507	17 258	17 913	18 890
Regional mineral development	13 023	14 877	26 886	30 006	32 407	33 614	35 126
Total	38 109	50 458	55 721	63 202	78 698	82 182	86 018
Change to 2000 Budget Estimate				1 625	2 277	2 686	

Economic classification							
Current	37 312	49 778	55 007	62 715	78 254	81 895	85 700
Personnel	26 544	31 438	33 321	36 857	39 839	41 927	43 844
Transfer payments	-	2 000	3 400	4 000	5 100	5 100	5 100
Other	10 768	16 340	18 286	21 858	33 315	34 868	36 756
Capital	797	680	714	487	444	287	318
Transfer payments	-	-	-	-	-	-	-
Acquisition of capital assets	797	680	714	487	444	287	318
Total	38 109	50 458	55 721	63 202	78 698	82 182	86 018

Standard items of expenditure							
Personnel	26 544	31 438	33 321	36 857	39 839	41 927	43 844
Administrative	4 759	5 893	6 243	8 155	9 413	9 697	10 391
Inventories	456	493	540	563	588	641	630
Equipment	1 090	964	1 013	753	759	623	652
Land and buildings	-	-	-	1	1	1	1
Professional and special services	4 872	9 171	10 654	12 341	22 998	24 193	25 400
Transfer payments	-	2 000	3 400	4 000	5 100	5 100	5 100
Miscellaneous							
Civil Pensions Stabilisation Fund	388	499	550	532	-	-	-
Total	38 109	50 458	55 721	63 202	78 698	82 182	86 018

Policy developments

The Department has drafted the Minerals Development Bill, which is based on the White Paper on a Mineral and Mining Policy, and replaces the Minerals Act of 1991 and the Diamonds Act of 1986. It provides, among others, for the recognition of the Government as the custodian of nation's mineral resources and for the development of the mineral wealth.

Regulations for the monitoring and performance assessment of environmental management programmes of mines came into effect in June 1999. This completed the establishment of an integrated environmental management system for the mining industry.

Expenditure trends

Spending on the *Mineral development* programme increased by an average of 18,4 per cent a year from 1997/98 to 2000/01, and is projected to average 10,8 per cent a year over the medium term. Significant growth on the programme is due mainly to increased expenditure on Regional mineral development. The subprogramme supports mineral development in the regions and has lately extended its activities to the development of small-scale mining operations. Its share of the programme rises from 34,2 per cent in 1997/98 to 47,5 per cent in 2000/01, before declining to 40,1 per cent by 2003/04.

Personnel expenditure has decreased as a share of the total programme from 69,7 per cent in 1997/98 to about 51 per cent in 2003/04. Accordingly, professional and special services have increased from 12,8 per cent in 1997/98 to 29,5 per cent in 2003/04. This can be attributed to the provision of additional funds for the rehabilitation of asbestos mine dumps and for the implementation of environmental management programmes in the mining industry.

Outputs and service delivery trends

Table 29. 6: Mineral development: Key outputs and indicators

Subprogramme	Outputs	Service delivery indicators
Mineral regulation	Prospecting and mining contracts and programmes	A uniform application of policy and legislation Strict compliance by mine owners Reduced turnaround time for processing of applications for prospecting and mining rights
	An integrated environmental management programme	Policy, legislation and guidelines Compliance with legal standards and requirements Implementation of environmental management plans Rehabilitation of derelict and ownerless mining complexes Reduced exposure of surrounding communities
Mineral promotion	Directories providing technical and commercial information	Easy access to mineral information – about 2 000 enquiries a year Approximately 10 000 publications distributed Increase sales of mineral products
Regional mineral development	Standards regarding rehabilitation of land surface and environment	2 340 inspections per year 2 000 prospecting and mining applications processed per year Administrative support services rendered to regions

Programme 4: Energy management

The aim of the programme is to develop energy resources and ensure the optimal utilisation thereof. Programme activities are organised into four subprogrammes:

- Management provides for the development and implementation of policies on energy resources.
- Energy supply is responsible for the implementation of the National Electrification Programme and the restructuring of the Electricity Distribution and Electricity Supply Industries.
- Demand and non-grid electrification is responsible for the development of a renewable energy strategy to implement renewable energy technologies.
- Liquid fuels facilitate the development and regulation of the liquid fuels and gas industries and the development at the coal industry.

Expenditure estimates

Table 29.7: Energy management

Subprogramme	Expenditure outcome				Medium-term expenditure estimate		
	Audited 1997/98	Audited 1998/99	Preliminary outcome 1999/00	Adjusted appropriation 2000/01	2001/02	2002/03	2003/04
R thousand							
Management	6 934	9 396	10 450	10 621	16 500	17 724	18 156
Energy supply ¹	6 428	6 680	5 511	27 062	608 046	608 988	609 392
Demand and non-grid electrification	21 462	27 068	2 061	5 644	4 393	4 891	5 110
Liquid fuels	507	1 738	1 840	5 473	5 134	5 495	5 743
Total	35 331	44 882	19 862	48 800	634 073	637 098	638 401
Change to 2000 Budget Estimate				20 028	604 091	604 122	

¹ Includes amount specifically and exclusively appropriated as contribution to the National Electricity Distribution Industry Project: R600 000 000

Economic classification							
Current	35 271	44 388	19 223	48 570	33 843	36 868	38 161
Personnel	4 903	6 432	6 278	7 230	7 599	7 968	7 962
Transfer payments	2 250	4 800	3 300	24 000	4 000	4 000	4 180
Other current	28 118	33 156	9 645	17 340	22 244	24 900	26 019
Capital	60	494	639	230	600 230	600 230	600 240
Transfer payments	-	-	-	-	600 000	600 000	600 000
Acquisition of capital assets	60	494	639	230	230	230	240
Total	35 331	44 882	19 862	48 800	634 073	637 098	638 401

Standard items of expenditure							
Personnel	4 903	6 432	6 278	7 230	7 599	7 968	7 962
Administrative	1 487	1 665	2 372	2 667	8 508	8 708	9 099
Inventories	43	182	45	225	250	275	287
Equipment	68	494	639	230	230	230	240
Land and buildings	-	-	-	-	-	-	-
Professional and special services	26 513	31 219	7 123	14 359	13 486	15 917	16 633
Transfer payments	2 250	4 800	3 300	24 000	604 000	604 000	604 180
Miscellaneous							
Civil Pensions Stabilisation Fund	67	90	105	89	-	-	-
Total	35 331	44 882	19 862	48 800	634 073	637 098	638 401

Policy developments

The *Energy management* programme has overseen the initial phase of the restructuring of the electricity distribution industry into six Regional Electricity Distributors. The draft proposals are still under review to ensure the financial viability of the new enterprises while safeguarding the price competitiveness of the industry. The restructuring process should broaden access to electricity and safeguard local government revenue flows.

The Department is responsible for the funding and management of the National Electrification Programme from 1 April this year. This policy shift follows the release of the White Paper on Energy Policy in December 1998 stating government's commitment to universal household access to electricity and the establishment of a National Electrification Fund to subsidise the programme. It coincides with the change in Eskom's tax-free status into a corporatised, tax and dividends-paying entity. The programme will now include the electrification of schools and clinics, which have been funded through a combination of Eskom and donor funding. This followed an initial fiscal contribution through the Reconstruction and Development Programme fund.

The *Energy management* programme is also responsible for monitoring the investigation and implementation of the free basic electrification service to poor households. An interim measure involves the free provision of 50 kW/h per household or alternatively R40 worth of non-grid electricity. The interim arrangement will serve as a pilot for the final policy framework, which will be presented to Cabinet in 2002.

The function of promoting the exploration and exploitation of South Africa's oil and gas resources has been separated from Soekor and vested in the newly established Petroleum Agency South Africa. This has removed the conflict of interest that arose as a result of Soekor's commercial involvement in the petroleum industry.

Following the decision to pilot the extension of non-grid electricity to areas that cannot be connected into the national grid, the Department is investigating:

- Implementing renewable energy technologies and creating an enabling environment for a viable commercial renewable energy market

- Promoting sustainable development of safe and healthy methods of biomass consumption, use of biodigesters and the identification of hydropower resources
- Developing standards for appropriate appliance and fuel combinations, energy efficient housing and solar water heating systems in order to meet a variety of energy needs in different areas

Regular investigations have been undertaken on the various components of the price of liquid fuels. These included a review of the in-bond landed cost (import parity pricing), wholesale and retail margins, service differential and tariff protection to the synthetic fuels industry. Strategies are being developed for the improvement of the affordability of certain fuels to specific user groups.

South Africa will require additional oil refining capacity in the foreseeable future. The Department is developing appropriate strategies to attract investment in new refinery investments. A draft Petroleum Pipeline Bill envisages the establishment of a regulatory authority for the petroleum pipeline industry. The White Paper on Energy Policy of 1998 targets a 25 per cent participation (ownership and control) of historically disadvantaged persons in the liquid fuels industry. A “Charter” has been agreed with the industry and establishment oil companies have undertaken to facilitate the entrance of the targeted group.

The Department has facilitated the development of gas markets by establishing cross-border trade agreements with Mozambique and Namibia, and a national pipeline development company. It has also promoted implementation of low-smoke fuels, clean coal technologies and the utilisation of low-grade and discarded coal. The Department continually evaluates the national coal resources and reserves in order to integrate energy planning and determine the sustainability of the country’s coal deposits.

Expenditure trends

Up to 2000/01, the *Energy management* programme was mainly responsible for policy formulation and sectoral regulation. Its allocation increased by 11,4 per cent a year between 1997/98 and 2000/01. R600 million a year is included in the medium-term allocation to fund the electrification programme, which will include non-grid electrification.

The programme is also responsible for the restructuring of the electricity distribution industry. An additional allocation of R20 million was made available to fund the first phase of the project. An initial draft report on the recommended principles and strategies has been presented to Cabinet. It is estimated that the project will require ongoing funding of R40 million a year over the medium term.

The introduction of the free basic electricity to poor households in areas without grid systems will require financial support of R8 million in 2001/02, R15 million in 2002/03 and R30 million 2003/04. Non-grid systems will not be funded from the electricity supply industry cross-subsidies. It is assumed that the electricity supply industry will carry an additional R600 million for the upgrading of meters and electricity systems.

Outputs and service delivery trends

Table 29.8: Energy management: Key outputs and indicators

Subprogramme	Outputs	Service delivery indicators
Management	Policy on the electricity distribution and electricity supply industries	Meet annual electrification targets Retain price competitiveness Rationalise electricity prices across regions

Subprogramme	Outputs	Service delivery indicators
Energy supply	National Electrification Programme	Improve the quality of service and supply Competition in electricity generation Open access to transmission systems Increased number of electrified households 660 schools and 40 clinics a year electrified
Demand and non-grid electrification	Electricity basic service support tariffs Updated South African Bureau of Standards solar water heating standards and performance testing procedures	Free basic electricity to consumers Relative substitution of fuel wood with solar cookers in areas
Liquid fuels	A restructured Central Energy Fund Group Petroleum stocks policy and strategy A regulatory framework for the petroleum pipeline industry Regulatory functions within the gas industry Participation in gas development	Rationalisation of Government's assets in the industry Implementation of the petroleum stocks policy and strategy Promulgation of a Petroleum Pipeline Bill Establishment of a regulatory authority Promulgation of a Gas Bill Establishment of a national gas regulator

Programme 5: Associated services

The programme renders services associated with the Department's aims. Its activities are organised into the following subprogrammes:

- Mineral technology research contributes towards the Council for Mineral Technology (Mintek) in terms of the Mineral Technology Act, 1989.
- South African Nuclear Energy Corporation maintains, develops and utilises nuclear and related technology in terms of the Nuclear Energy Act, 1999.
- The National Nuclear Regulator exercises control over nuclear installations to provide for the protection of persons, property and the environment against nuclear damage according to the National Nuclear Regulator Act, 1999.
- Geoscience provides for a contribution to the Council for Geoscience in terms of the Geoscience Act, 1993.
- Assistance to mines provides for assistance to marginal mines faced with the costs of pumping extraneous waters originating from adjacent defunct gold mines.
- Energy provision contributes towards audit fees for the Cahora Bassa project and towards the operation and management of the distribution of electricity from the project.
- Government motor transport purchases vehicles for departmental use, as well as for allocation under the subsidised motor transport scheme.

Expenditure estimates

Table 29.9: Associated services

Subprogramme	Expenditure outcome				Medium-term expenditure estimate		
	Audited 1997/98	Audited 1998/99	Preliminary outcome 1999/00	Adjusted appropriation 2000/01	2001/02	2002/03	2003/04
R thousand							
Mineral Technology Research ¹	87 574	85 846	81 773	78 007	76 872	76 410	79 363
Nuclear energy	473 772	287 626	249 814	200 245	180 256	419 947	161 190
National Nuclear Regulator	5 400	5 800	6 088	6 762	7 002	7 282	7 610
Geoscience ²	66 962	67 262	63 794	60 856	65 946	66 384	68 687
Assistance to mines	36 298	30 900	29 012	29 500	34 940	36 881	39 183
Loans to mines	-	-	-	1	1	1	1
Energy provision	169	183	203	249	270	281	294
Government motor transport	4 033	5 223	292	800	200	200	210
Total	674 208	482 840	430 976	376 420	365 487	607 386	356 538
Change to 2000 Budget Estimate				1 175	7 406	17 561	

¹ Includes an amount specifically and exclusively appropriated as a contribution to Mineral Technology Research: R 76 872 000

² Includes an amount specifically and exclusively appropriated as a contribution to the Council for Geoscience: R65 946 000

Economic classification

Current	469 126	407 744	388 107	352 449	334 238	350 502	337 378
Personnel	--	-	-	-	-	-	-
Transfer payments	468 957	407 561	387 904	352 201	333 969	350 222	337 085
Other current	169	183	203	248	269	280	293
Capital	205 082	75 096	42 869	23 971	31 249	256 884	19 160
Transfer payments	204 685	75 006	42 860	23 271	31 149	256 784	19 055
Acquisition of capital assets	397	90	9	700	100	100	105
Total	674 208	482 840	430 976	376 420	365 487	607 386	356 538

Standard items of expenditure

Personnel	-	-	-	-	-	-	-
Administrative	-	-	-	-	-	-	-
Inventories	-	-	-	-	-	-	-
Equipment	397	90	9	700	100	100	105
Land and buildings	-	-	-	-	-	-	-
Professional and special services	169	183	203	248	269	280	293
Transfer payments	673 642	482 567	430 764	375 472	365 118	607 006	356 140
Miscellaneous	-	-	-	-	-	-	-
Total	674 208	482 840	430 976	376 420	365 487	607 386	356 538

Expenditure trends

Spending on *Associated services* has declined by an average of 17,7 per cent a year between 1997/98 and 2000/01. This is mainly a result of the curtailment of the operations of the Nuclear Energy Corporation, as well as a drive to commercialise other departmental activities, such as fluorine chemical and radiation technology divisions. Operational expenditure for the Nuclear Energy Corporation declines from R220,9 million in 1997/98 to R129 million in 2001/02, and is projected to increase R140,2 million in 2003/04.

Expenditure on the decommissioning and decontamination projects has been stable at an average of about R20 million a year between 1997/98 and 2003/04. The process to redeem the loans of the Nuclear Energy Corporation will culminate with payments of R265,5 million in 2002/03, R1,4 million in 2003/04 and R10 million in 2004/05.

Expenditure on Assistance to mines declined by an average of 6,7 per cent between 1997/98 and 2000/01, but is projected to increase by 9,9 per cent a year over the medium term. A review of targeted assistance was conducted by the Gold Crises Committee.

Transfers to science councils declined by about 18 per cent a year between 1997/98 and 2000/01. Over the medium term, the transfers decrease by 3 per cent a year. Allocations for individual councils are based on recommendations of the National Advisory Council on Innovation, which seeks to rationalise funding between science councils and also to direct resources to areas of relative priority.

Public entities reporting to the Minister responsible for Minerals and Energy

National Electricity Regulator

The National Electricity Regulator was established in terms of the Electricity Act, 1987 as amended. The role of the Regulator is to regulate the electricity supply industry to meet the requirements of existing and future customers. Its key functions are to approve the prices at which electricity is sold and to set and monitor quality of supply and service standards. It has licensed all generators, transmitters and distributors of electricity in South Africa. It approves their electricity prices on (at least) an annual basis, and arbitrates in a range of disputes between licensees and customers. The Regulator is currently funded through a levy on electricity, which is determined by the Minister of Minerals and Energy in consultation with the Minister of Finance. The projected revenue of the Regulator over the medium term is about R22 million per year.

South African Nuclear Energy Corporation (Pty) Ltd

The South African Nuclear Energy Corporation was established in terms of the Nuclear Energy Act, 1999. The Corporation seeks contribute to Government's socio-economic priorities through the national and worldwide promotion, utilisation and commercial application of nuclear and related technologies. Government has identified the following three broad organisation activities for the Corporation:

- Decommissioning and decontamination of past strategic nuclear fuel facilities, the management of nuclear waste disposal on a national basis, and related regulatory functions
- Commercial activities, including mechanical and systems engineering, which focus on gas and liquid membrane separation systems and radiation technology
- Determining the viability or necessity of producing large-scale isotopes for the export market and the possible extension to academic research and training

Mineral Technology Research (Mintek)

Mintek was established in terms of the Mineral and Technology Act, 1989. It provides research, development and technology transfers that foster the development of businesses in the mineral and mineral product industries. Mintek strives, through innovative research and development, to be a global leader in the field of mineral and metallurgical research, development and technology transfer. Mintek promotes the best-practice implementation of technologies to recover and add value to mineral resources. It achieves these objectives through the transfer of technology to the industry, the promotion of the optimal supply and efficient utilisation of mineral resources, and by ensuring that its expertise and technology is internationally competitive. Transfers to Mintek reflect a slight increase of 0,6 per cent a year from R76,9 million in 2001/02 to R79,4 million in 2003/04.

National Nuclear Regulator

The National Nuclear Regulator, formerly known as the Council for Nuclear Safety, was established in terms of the National Nuclear Regulator Act of 1999. It provides for the protection

of persons, property and the environment against nuclear damage through the establishment of safety and regulatory practices for the following:

- The construction or use of a nuclear installation
- Use, production, storage, processing, enriching, reprocessing, conveyance or disposal of radioactive materials
- Discarding of radioactive waste and storage of irradiated nuclear fuel

The main technical function of the Regulator is to grant licences with attendant conditions for the above activities and to advise the Minister on related matters.

Council for Geoscience

The Council for Geoscience was established in terms of the Geoscience Act of 1993. The Council is responsible for:

- Systematic geoscientific mapping of South Africa, and the interpretation and compilation of data, maps and map explanations
- Geological research to improve the understanding of geological processes
- Collecting and compiling all geoscience data for South Africa in the National Geoscience Archives
- Maintaining the National Borehole Core Depository, the National Geoscience Library and the National Geoscience Museum
- Providing geoscience knowledge services to the Department and the private sector

Central Energy Fund (Pty) Ltd

The Central Energy Fund oversees a diverse number of subsidiaries including Mossgas, the Strategic Fuel Fund, Soekor, Enerkom, Syncat and the Equalisation Fund. Their range from strategic, commercial and administrative to development. An exercise has been undertaken to “normalise” the accounts and values of the subsidiaries in preparation for their restructuring and the formulation of their dividend policies. The Central Energy Fund does not receive allocations from the fiscus.

Mining Qualifications Authority

The Mining Qualifications Authority advises the Minister on qualifications and learning achievements in the mining industry in order to improve health and safety through proper training and education.

Annexure: Vote 29: Minerals and Energy

Table 29.10: Summary of expenditure trends and estimates per programme

Table 29.11: Summary of expenditure trends and estimates per economic classification

Table 29.12: Summary of expenditure trends and estimates per standard item

Table 29.13: Summary of transfers and subsidies per programme

Table 29.14: Summary of personnel numbers and costs

Table 29.15: Summary of expenditure on training

Table 29.10: Summary of expenditure trends and estimates per programme

	Expenditure outcome			Main appropriation	Adjustments appropriation			Revised estimate	Medium-term expenditure estimate				
	Audited	Audited	Preliminary outcome		Rollovers from 1999/00	Other adjustments	Adjusted appropriation		Current	Capital	Total	2002/03	2003/04
	1997/98	1998/99	1999/00										
R thousand													
Administration	32 857	37 405	42 659	44 792	411	1 221	46 424	46 424	49 699	3 151	52 850	55 947	59 469
Promotion of mine safety and health	44 666	56 547	62 238	67 333	71	1 461	68 865	68 865	74 184	490	74 674	79 982	83 598
Mineral development	38 109	50 458	55 721	61 577	431	1 194	63 202	63 202	78 254	444	78 698	82 182	86 018
Energy management	35 331	44 882	19 862	28 772	1 624	18 404	48 800	48 800	33 843	600 230	634 073	637 098	638 401
Associated services	674 208	482 840	430 976	375 245	-	1 175	376 420	376 420	334 238	31 249	365 487	607 386	356 538
Total	825 171	672 132	611 456	577 719	2 537	23 455	603 711	603 711	570 218	635 564	1 205 782	1 462 595	1 224 024
Change to 2000 Budget Estimate							25 992	25 992			621 083	633 486	

Table 29.11: Summary of expenditure trends and estimates per economic classification

	Expenditure outcome			Main appropriation	Adjustments appropriation			Revised estimate	Medium-term expenditure estimate				
	Audited	Audited	Preliminary outcome		Rollovers from 1999/00	Other adjustments 2000/01	Adjusted appropriation		Current	Capital	Total	2002/03	2003/04
	1997/98	1998/99	1999/00	2001/02									
R thousand													
Current	614 697	591 369	562 883	550 248	2 426	22 393	575 067	575 067	570 218	-	570 218	600 957	599 976
Personnel	76 802	92 808	100 789	109 033	-	4 180	113 213	113 213	121 623	-	121 623	128 304	134 706
Salaries and wages	55 468	68 203	77 539	78 279	-	4 180	82 459	82 459	88 611	-	88 611	93 473	98 143
Other	21 334	24 605	23 250	30 754	-	-	30 754	30 754	33 012	-	33 012	34 831	36 563
Transfer payments	471 207	416 761	398 035	362 426	-	20 575	383 001	383 001	343 069	-	343 069	359 322	346 365
Other levels of Government	150 172	151 073	143 555	141 224	-	575	141 799	141 799	131 218	-	131 218	130 194	135 930
Households and non-profit institutions	-	-	-	-	-	-	-	-	-	-	-	-	-
Foreign countries and international credit institutions	-	-	-	-	-	-	-	-	-	-	-	-	-
Other current transfers	321 035	265 688	254 480	221 202	-	20 000	241 202	241 202	211 851	-	211 851	229 128	210 435
Other current expenditure	66 688	81 800	64 059	78 789	2 426	(2 362)	78 853	78 853	105 526	-	105 526	113 331	118 905
Capital	210 474	80 763	48 573	27 471	111	1 062	28 644	28 644	-	635 564	635 564	861 638	624 048
Capital transfers	204 685	75 006	42 860	23 271	-	-	23 271	23 271	-	631 149	631 149	856 784	619 055
Other levels of Government	9 764	12 635	11 400	-	-	-	7 826	7 826	-	16 100	16 100	17 100	16 800
Other capital transfers	194 921	62 371	31 460	15 445	-	-	15 445	15 445	-	615 049	615 049	839 684	602 255
Movable capital	5 789	5 757	5 713	4 200	111	1 062	5 373	5 373	-	4 415	4 415	4 854	4 993
Motor vehicles	397	90	9	100	-	600	700	700	-	100	100	100	105
Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-
Computers	3 557	4 031	4 557	3 009	53	462	3 524	3 524	-	2 885	2 885	3 434	3 589
Other office equipment	809	684	459	498	58	-	556	556	-	940	940	954	898
Other	1 026	952	688	593	-	-	593	593	-	490	490	366	401
Fixed capital	-	-	-	-	-	-	-	-	-	-	-	-	-
Land	-	-	-	-	-	-	-	-	-	-	-	-	-
Buildings	-	-	-	-	-	-	-	-	-	-	-	-	-
Infrastructure	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	825 171	672 132	611 456	577 719	2 537	23 455	603 711	603 711	570 218	635 564	1 205 782	1 462 595	1 224 024

Table 29.12: Summary of expenditure trends and estimates per standard item

	Expenditure outcome			Main appropriation	Adjustments appropriation			Revised estimate	Medium-term expenditure estimate				
	Audited	Audited	Preliminary outcome		Rollovers from 1999/00	Other adjustments 2000/01	Adjusted appropriation		Current	Capital	Total	2002/03	2003/04
	1997/98	1998/99	1999/00										
R thousand													
Personnel	76 802	92 808	100 789	109 033	–	4 180	113 213	113 213	121 623	–	121 623	128 304	134 706
Administrative expenditure	20 266	24 524	26 771	31 373	21	(88)	31 306	31 306	46 010	–	46 010	49 283	52 129
Inventories	2 253	2 448	3 062	3 095	–	–	3 095	3 095	3 560	–	3 560	4 051	4 282
Equipment	6 771	7 199	7 677	6 453	111	1 062	7 626	7 626	2 403	4 415	6 818	7 404	7 582
Land and buildings	–	–	–	1	–	–	1	1	1	–	1	1	1
Professional and special services	42 137	51 812	30 663	40 494	2 405	(2 274)	40 625	40 625	53 452	–	53 452	57 346	59 804
Transfer payments	675 892	491 767	440 895	385 697	–	20 575	406 272	406 272	343 069	631 149	974 218	1 216 106	965 420
Miscellaneous	1 050	1 574	1 599	1 573	–	–	–	–	100	–	100	100	100
Total	825 171	672 132	611 456	577 719	2 537	23 455	603 711	603 711	570 218	635 564	1 205 782	1 462 595	1 224 024

Table 29.13: Summary of transfers and subsidies per programme

	Expenditure outcome			Main appropriation	Adjustments appropriation			Revised estimate	Medium-term expenditure estimate				
	Audited	Audited	Preliminary outcome		Rollovers from 1999/00	Other adjustments 2000/01	Adjusted appropriation		Current	Capital	Total	2002/03	2003/04
	1997/98	1998/99	1999/00										
R thousand													
Promotion of mine safety and health	-	2 400	3 431	2 800	-	-	2 800	2 800	-	-	-	-	-
Mining Qualifications Authority	-	2 400	3 431	2 800	-	-	-	-	-	-	-	-	-
Mineral development	-	2 000	3 400	4 000	-	-	4 000	4 000	5100	-	5100	5100	5 100
Industrial Development Corporation	-	2 000	3 400	4 000	-	-	4 000	4 000	5 100	-	5 100	5 100	5 100
Energy management	2 250	4 800	3 300	4 000	-	20 000	24 000	24 000	4 000	600 000	604 000	604 000	604 180
Renewable Energy for South Africa	2 250	-	-	-	-	-	-	-	-	-	-	-	-
National Electricity Regulator	-	4 800	3 300	4 000	-	-	4 000	4 000	4 000	-	4 000	4 000	4 180
Electricity distribution industry	-	-	-	-	-	20 000	20 000	20 000	-	600 000	600 000	600 000	600 000
Associated services	673 642	482 567	430 764	374 897	-	575	375 472	375 472	333 969	31 149	365 118	607 006	356 140
Mineral Technology Research	87 574	85 846	81 773	77 684	-	323	78 007	78 007	68 872	8 000	76 872	76 410	79 363
Nuclear energy	473 772	287 626	564	200 245	-	-	200 245	200 245	165 307	14 949	180 256	419 947	161 190
National Nuclear Regulator	5 400	5 800	6 088	6 762	-	-	6 762	6 762	6 502	500	7 002	7 282	7 610
Geoscience	66 962	67 262	63 794	60 604	-	252	60 856	60 856	58 346	7 600	65 946	66 384	68 687
Assistance to mines	36 298	30 900	29 012	29 500	-	-	29 500	29 500	34 940	-	34 940	36 881	39 183
Loans to mines	-	-	-	1	-	-	1	1	1	-	1	1	1
Energy provision	-	-	-	1	-	-	1	1	1	-	1	1	1
Government motor transport	3 636	5 133	283	100	-	-	100	100	-	100	100	100	105
Total	675 892	491 767	440 895	385 697	-	20 575	406 272	406 272	343 069	631 149	974 218	1 216 106	965 420

1 Amounts specifically and exclusively appropriated.

Table 29.14: Summary of personnel numbers and costs¹

Personnel numbers	1997/98	1998/99	1999/00	2000/01	2001/02
Administration	167	172	172	173	195
Promotion of mine safety and health	304	308	301	301	288
Mineral development	343	343	350	349	340
Energy management	36	48	48	48	48
Total	850	871	871	871	871
Total personnel cost (R thousand)	76 802	92 808	100 789	113 213	121 623
Unit cost (R thousand)	90,4	106,6	115,7	130,0	139,6

1 Full-time equivalent

Table 29.15: Summary of expenditure on training

R thousand	Preliminary outcome	Revised estimate	Medium-term expenditure estimate		
	1999/00	2000/01	2001/02	2002/03	2003/04
Administration	406	831	495	505	508
Promotion of mine safety and health	799	553	590	590	590
Mineral development	412	531	398	419	438
Energy management	119	63	76	80	80
Total	1 736	1 978	1 559	1 594	1 616